



Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION
 DATE OF RELEASE: SEPTEMBER 18, 1970 - ATLANTA, GEORGIA 30333

CURRENT TRENDS

ASEPTIC MENINGITIS - United States 1970

Through September 12, 3,091 cases of aseptic meningitis have been reported to the CDC for 1970. This represents the greatest total number of cases reported through this time for any year since 1963, the year in which this syndrome was first reported as a distinct entity (Figure 1). Increased levels of reporting have been noted for the Middle Atlantic, South Atlantic, Mountain, and Pacific divisions. Although in part this increased number of cases is due to emphasis on reporting, reports from several states correlated with recognized outbreaks of aseptic meningitis.

In a number of instances, these outbreaks of aseptic meningitis were associated with a specific enteroviral agent. Echovirus types 6 and 9 were isolated from persons with aseptic meningitis in Florida (MMWR, Vol. 19, No. 29); echovirus type 6 was implicated in an outbreak earlier in the summer in the Atlanta, Georgia, area (MMWR, Vol. 19,

CONTENTS

Current Trends
 Aseptic Meningitis - United States 1970 357
 Arthropodborne Encephalitis - United States, 1970 359
 Epidemiologic Notes and Reports
 Lead Poisoning - Newark, New Jersey 358
 Trypanosomiasis - California 359
 Summaries of Reported Cases of Infectious Syphilis 360
 Surveillance Summary
 Malaria - United States and Puerto Rico - 1969 361
 International Notes
 Salmonella Agona Infections - United Kingdom 362
 Quarantine Measures 363

No. 26), and echovirus type 9 was associated with an outbreak in Arizona. Echovirus type 3 was associated with outbreaks in Michigan and Minnesota, and echovirus type 4 with an outbreak in the District of Columbia. Localized outbreaks associated with echovirus types 1, 2, 3, 4, 9, 12, and 28 were reported from California. Results of virologic studies are pending for local outbreaks reported from New

(Continued on page 358)

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
 (Cumulative totals include revised and delayed reports through previous weeks)

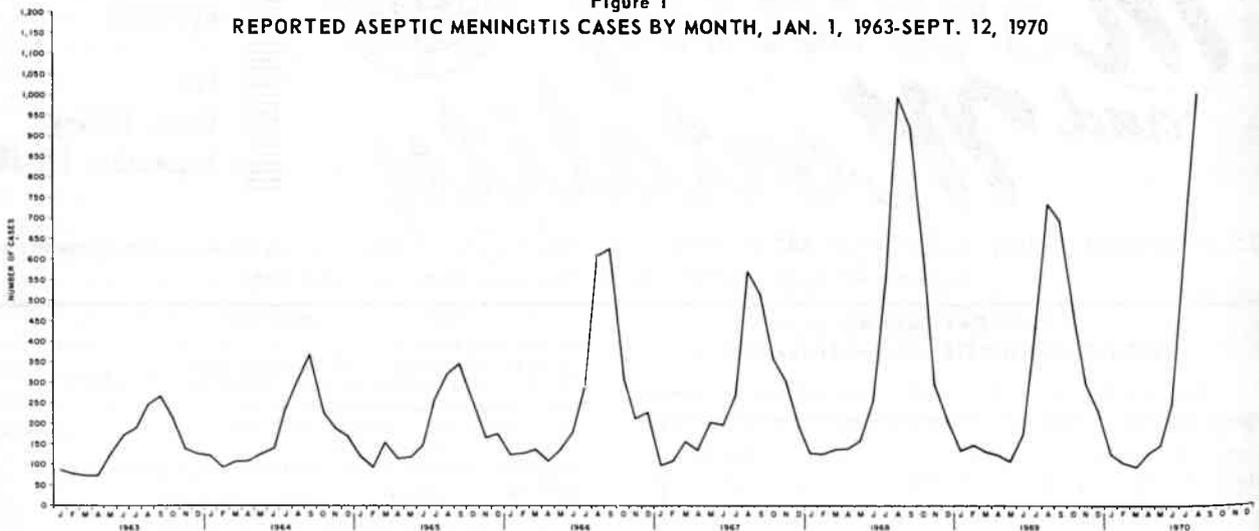
DISEASE	36th WEEK ENDED		MEDIAN 1965 - 1969	CUMULATIVE, FIRST 36 WEEKS		
	September 12, 1970	September 6, 1969		1970	1969	MEDIAN 1965 - 1969
Aseptic meningitis	276	148	144	3,091	1,856	1,775
Brucellosis	7	5	3	143	153	164
Diphtheria	27	4	7	272	108	108
Encephalitis, primary:						
Arthropod-borne & unspecified	50	40	42	947	774	1,084
Post-infectious	5	1	10	319	239	534
Hepatitis, serum	111	75	628	4,950	3,611	27,659
Hepatitis, infectious	933	845		38,399	31,945	
Malaria	36	51	32	2,333	1,932	1,355
Measles (rubeola)	118	122	194	39,508	20,258	57,620
Meningococcal infections, total	23	23	23	1,844	2,346	2,291
Civilian	19	22	22	1,656	2,140	2,110
Military	4	1	-	188	206	181
Mumps	552	364	---	75,443	67,742	---
Poliomyelitis, total	-	-	3	18	11	40
Paralytic	-	-	2	18	11	37
Rubella (German measles)	292	208	---	49,252	48,791	---
Tetanus	4	5	5	81	99	120
Tularemia	9	6	2	101	103	125
Typhoid fever	11	11	11	208	201	252
Typhus, tick-borne (Rky. Mt. spotted fever)	10	21	12	289	375	229
Rabies in animals	55	58	62	2,146	2,490	2,979

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	1	Psittacosis: Md.-1	23
Botulism:	9	Rabies in Man:	2
Leprosy: Calif.-2, La.-1	90	Rubella congenital syndrome:	45
Leptospirosis: Ind.-1	30	Trichinosis: La.-1, Mass.-2, N.Y.Ups.-1, Va.-1	72
Plague:	9	Typhus, murine: S.C.-1	31

ASEPTIC MENINGITIS - (Continued from front page)

Figure 1
REPORTED ASEPTIC MENINGITIS CASES BY MONTH, JAN. 1, 1963-SEPT. 12, 1970



York City, Pennsylvania, Virginia, Kentucky, Tennessee, Kansas, and Alaska.

(Reported by the Neurotropic Viral Diseases Unit, Epidemiology Program, CDC.)

Editorial Comment:

Although echovirus types 6 and 9 have frequently been implicated in localized outbreaks of aseptic meningitis during each of the years from 1963 through 1970, echovirus

types 3 and 4 have been isolated only sporadically during most of this 10-year period; at this time, however, activity of echovirus types 3 and 4 appears to be increasing in 1970. Infection with echovirus type 30, an enterovirus frequently reported in association with aseptic meningitis during 1968*, has been implicated only rarely for outbreaks to date in 1970.

*1970 data are compared with 1968 data because 1969 data have not been finalized.

EPIDEMIOLOGIC NOTES AND REPORTS

LEAD POISONING - Newark, New Jersey

In the 15-month period from January 1969 through March 1970, 94 children were hospitalized in Newark, New Jersey, for lead poisoning. Three of the cases in the spring and early summer of 1969 were fatal. It was estimated that 1,200 to 3,000 children in the city need medical attention for lead intoxication annually.

During the same 15-month period, 1,973 children underwent screening for lead intoxication by assessment of δ -aminolevulinic acid (ALA) in the urine. Although 113 were found to be positive, 61 of them did not receive subsequent blood determinations and were lost to surveillance. Of the 52 who did have subsequent blood determinations, 28 were hospitalized, but four others with blood levels over 60 μ g percent and seven with levels of 40-59 μ g percent were neither hospitalized nor further tested. An additional 134 children had blood lead determinations (no urine screening); 105 were found to have concentrations exceeding 40 μ g percent. Of these, 43 were neither hospitalized nor followed adequately. Of the children hospitalized for lead poisoning or with blood levels over 60 μ g percent, at least 60 percent of their known siblings (born 1963-1968) had neither blood lead determinations nor ALA urine screening done.

The children treated in hospitals by chelation usually responded favorably. When they were discharged again, it

was to environments unchanged from those in which they had been poisoned. Based on the 1960 census, over two-thirds of the approximately 40,000 Newark children in the age group 1 to 5 years reside in housing typical of lead poisoning environments.

One-third of the children with lead poisoning were re-hospitalized during the 15-month period for repeated poisoning. This is illustrated by a fatal case. This patient was first hospitalized for lead poisoning in September 1968. He was treated successfully and discharged. In June 1969 he was readmitted with a 2-week history of lethargy and convulsions. The hemoglobin was 5.6 g, and the blood lead was 190 μ g percent. Despite vigorous therapy, he died on the seventh hospital day.

In response to the evidence of a substantial lead problem in Newark, the New Jersey College of Medicine and Dentistry in collaboration with the Newark Division of Health and the New Jersey State Department of Health is initiating a program of detection, treatment, community intervention, and preventive education utilizing community-trained health assistants.

(Reported by Anne Browder, M.D., Assistant Professor of Public Health and Preventive Medicine, New Jersey College of Medicine and Dentistry; and Aaron Haskin, M.D., Health Officer, Newark Division of Health.)

TRYPANOSOMIASIS - California

A 19-year-old man was hospitalized with a 7-day history of recurrent chills and fever on Aug. 31, 1970, the day after he returned to the United States from Africa. Since August 1, the patient and his family had been on a hunting safari in Botswana, Africa, where they had been heavily bitten by tsetse flies. On August 22, the patient had noted a small lesion on his left thigh followed 2 days later by weakness, anorexia, and headache. By August 25, the lesion had become indurated, and the patient had temperatures to 104°F. associated with periods of agitation, confusion, and hallucinations. He subsequently lost 12 to 15 pounds. Although parasitic disease was suspected, a blood smear taken in Nairobi, Kenya, was reported as negative for trypanosomes and malaria parasites.

On physical examination he appeared acutely ill, dehydrated, and lethargic but was well oriented without hallucinations. His temperature was 104.6°F., and there was a 6 cm chancre on the left thigh. He also had left inguinal lymphadenopathy, a palpable spleen, a petechial rash on the legs, and mild facial edema. Neurologic examination was normal.

Blood smears at the time of admission had approximately six trypanosomes per oil immersion field. Other pertinent laboratory findings included hematocrit 34, WBC 5,200 mm³, platelets 36,000 mm³, Na 120 mEq/L, Cl 94 mEq/L, bilirubin 1.0 mg percent, SGOT 327 units, LDH 4,000 units, BUN 29 mg percent, creatinine 1.5 mg percent, and a 1+ proteinuria. Lumbar puncture demonstrated increased pressures (250/150 mm water) but was otherwise normal (protein 17 mg percent, glucose 70 mg percent, and no cells or trypanosomes). Additional blood studies indicated disseminated intravascular coagulation and Coomb's positive hemolytic anemia.

Before Suramin* was available, the patient was given pentamidine,* but 24 hours later the parasitemia had not lessened. Suramin therapy was then instituted, and by

September 2, parasites were no longer demonstrable in peripheral smears, and there was marked clinical improvement. Although heparin was considered, it was not used, since clotting factors returned to normal as the infection was controlled. Hemolysis has persisted, however. Therapy will continue intermittently over a period of 3 weeks.

There were nine other people on the safari, all of whom are asymptomatic. Smears from four were negative for parasites; smears are being obtained from the other five.

(Reported by Abraham I. Braude, M.D., Professor of Medicine and Pathology, University Hospital of San Diego County; Donald G. Ramras, M.D., Assistant Director of Public Health, and J.B. Askew, M.D., Director of Public Health, County of San Diego Department of Public Health; James Chin, M.D., Chief, Bureau of Communicable Disease Control, California State Department of Health; and an EIS Officer.)

Editorial Comment:

Botswana, located in southern Africa, represents the southernmost distribution. endemic for *Trypanosoma rhodesiense* (i.e., 20°S. latitude). The vector in this area is *Glossina morsitans*. The hunting lodge visited by this hunting party is situated along the Khwai River in the region of the Okavango Swamps and is in a dense tsetse fly area. It is also the site of many types of wild animals which are potential reservoirs of infection. The epidemiologic features of East African sleeping sickness make hunters, fishermen, and tourists visiting rural areas particularly susceptible. Chemoprophylaxis is not recommended at this time, and although heavy clothing and insect repellents may offer some protection against the bites of flies, travelers should be alerted to areas endemic for trypanosomiasis. A careful travel history by the physician can aid in the prompt diagnosis and treatment of this infection.

*Available from the Parasitic Disease Drug Service, CDC.

CURRENT TRENDS

ARTHROPODBORNE ENCEPHALITIS - United States 1970

So far this year there have been no reported outbreaks of encephalitis in humans due to arthropodborne viruses (arboviruses) in the United States; however, sporadic cases have occurred among humans, and limited outbreaks have occurred among equines.

Three confirmed human cases of Eastern equine encephalomyelitis (EEE) have been reported to date. One of the patients was a 45-year-old man from Florida, whose illness began in July 1970. A 12-year-old girl from Florida contracted encephalitis in mid-August, and blood specimens showed an acute titer of 1:80 and convalescent titer of 1:320 against EEE. The third patient was a 5-month-old baby from Massachusetts. No deaths have been reported. Thirty-five horses have reportedly died of EEE infection in Massachusetts and four in Louisiana.

Two states have reported California encephalitis (CE). Ohio reported eight confirmed and one presumptive cases of CE; all cases occurred in children less than 14 years

of age, and dates of onset ranged from June 11 to August 11. Iowa reported one case; acute serum from a 12-year-old resident of Iowa who visited Minnesota 2 weeks before onset of symptoms had a titer of 1:320 against CE virus by hemagglutination-inhibition testing.

St. Louis encephalitis (SLE) has been confirmed for a 63-year-old woman living in Caloosa County, California, whose symptoms developed in mid-July. One confirmed human case of SLE has been reported from New Mexico. Several horse deaths serologically related to recent infection with SLE virus also have been reported from New Mexico.

Only one case of human encephalitis due to infection with Western equine encephalomyelitis (WEE) virus has been reported in 1970. However, horse deaths attributed to WEE infection have been reported from Colorado, North Dakota, Texas, New Mexico, and Oklahoma.

(Reported by the Neurotropic Viral Diseases Unit, Viral Diseases Branch, Epidemiology Program, CDC.)

SUMMARIES OF REPORTED CASES OF INFECTIOUS SYPHILIS

CASES OF PRIMARY AND SECONDARY SYPHILIS: By Reporting Areas July 1969 and July 1970 - Provisional Data

Reporting Area	July		Cumulative Jan. - July		Reporting Area	July		Cumulative Jan. - July	
	1970	1969	1970	1969		1970	1969	1970	1969
NEW ENGLAND.....	44	42	317	209	EAST SOUTH CENTRAL.....	87	51	437	566
Maine.....	1	2	10	4	Kentucky.....	21	6	108	103
New Hampshire.....	1	4	2	7	Tennessee.....	13	8	103	165
Vermont.....	-	1	1	1	Alabama.....	22	26	89	148
Massachusetts.....	22	22	177	123	Mississippi.....	31	11	137	150
Rhode Island.....	1	2	33	18	WEST SOUTH CENTRAL.....	333	293	2,195	2,181
Connecticut.....	19	11	94	56	Arkansas.....	29	23	157	113
MIDDLE ATLANTIC.....	481	332	3,021	2,145	Louisiana.....	53	67	416	496
Upstate New York.....	45	17	226	158	Oklahoma.....	5	5	48	48
New York City.....	321	235	2,129	1,468	Texas.....	246	198	1,574	1,524
Pa. (Excl. Phila.).....	10	12	83	88	MOUNTAIN.....	69	75	354	365
Philadelphia.....	18	14	118	125	Montana.....	2	-	2	5
New Jersey.....	87	54	465	306	Idaho.....	-	1	1	5
EAST NORTH CENTRAL.....	194	225	1,446	1,479	Wyoming.....	3	-	3	4
Ohio.....	25	31	212	209	Colorado.....	5	6	29	31
Indiana.....	37	33	269	206	New Mexico.....	11	37	75	163
Downstate Illinois.....	9	32	72	160	Arizona.....	32	19	153	113
Chicago.....	76	69	498	519	Utah.....	1	3	5	9
Michigan.....	41	54	338	371	Nevada.....	15	9	86	35
Wisconsin.....	6	6	57	14	PACIFIC.....	278	166	1,420	1,062
WEST NORTH CENTRAL.....	36	31	323	192	Washington.....	2	5	27	32
Minnesota.....	3	11	51	27	Oregon.....	4	3	18	25
Iowa.....	-	-	9	20	California.....	269	157	1,364	999
Missouri.....	14	11	169	94	Alaska.....	1	-	5	2
North Dakota.....	-	-	3	3	Hawaii.....	2	1	6	4
South Dakota.....	4	-	12	7	U. S. TOTAL.....	1,891	1,587	12,309	10,994
Nebraska.....	2	3	15	18	TERRITORIES.....	60	54	568	699
Kansas.....	13	6	64	23	Puerto Rico.....	60	54	550	682
SOUTH ATLANTIC.....	369	372	2,796	2,795	Virgin Islands.....	---	-	18	17
Delaware.....	5	6	76	27					
Maryland.....	30	25	248	245					
District of Columbia.....	55	48	294	316					
Virginia.....	16	36	152	156					
West Virginia.....	3	3	15	12					
North Carolina.....	27	36	294	306					
South Carolina.....	24	56	207	350					
Georgia.....	94	91	741	580					
Florida.....	115	71	769	803					

Note: Cumulative Totals include revised and delayed reports through previous months.

CASES OF PRIMARY AND SECONDARY SYPHILIS: By Reporting Areas August 1969 and August 1970 - Provisional Data

Reporting Area	August		Cumulative Jan. - Aug.		Reporting Area	August		Cumulative Jan. - Aug.	
	1970	1969	1970	1969		1970	1969	1970	1969
NEW ENGLAND.....	34	40	351	249	EAST SOUTH CENTRAL.....	72	83	509	649
Maine.....	-	-	10	4	Kentucky.....	29	12	137	115
New Hampshire.....	-	-	2	7	Tennessee.....	14	32	117	197
Vermont.....	-	-	1	1	Alabama.....	16	23	105	171
Massachusetts.....	19	27	196	150	Mississippi.....	13	16	150	166
Rhode Island.....	6	8	39	26	WEST SOUTH CENTRAL.....	368	315	2,563	2,496
Connecticut.....	9	5	103	61	Arkansas.....	22	24	179	137
MIDDLE ATLANTIC.....	529	405	3,550	2,550	Louisiana.....	73	74	489	570
Upstate New York.....	34	26	260	184	Oklahoma.....	14	3	62	51
New York City.....	400	304	2,529	1,772	Texas.....	259	214	1,833	1,738
Pa. (Excl. Phila.).....	17	9	100	97	MOUNTAIN.....	46	49	400	414
Philadelphia.....	17	20	135	145	Montana.....	3	1	5	6
New Jersey.....	61	46	526	352	Idaho.....	-	1	1	6
EAST NORTH CENTRAL.....	194	212	1,640	1,691	Wyoming.....	-	1	3	5
Ohio.....	35	41	247	250	Colorado.....	1	3	30	34
Indiana.....	34	27	303	233	New Mexico.....	8	15	83	178
Downstate Illinois.....	11	9	83	169	Arizona.....	12	17	165	130
Chicago.....	59	84	557	603	Utah.....	4	3	9	12
Michigan.....	49	49	387	420	Nevada.....	18	8	104	43
Wisconsin.....	6	2	63	16	PACIFIC.....	233	185	1,653	1,247
WEST NORTH CENTRAL.....	29	46	352	238	Washington.....	1	7	28	39
Minnesota.....	3	5	54	32	Oregon.....	3	3	21	28
Iowa.....	-	6	9	26	California.....	223	172	1,587	1,171
Missouri.....	22	20	191	114	Alaska.....	4	3	9	5
North Dakota.....	-	3	3	6	Hawaii.....	2	-	8	4
South Dakota.....	1	2	13	9	U. S. TOTAL.....	1,954	1,791	14,263	12,785
Nebraska.....	-	4	15	22	TERRITORIES.....	68	103	636	802
Kansas.....	3	6	67	29	Puerto Rico.....	67	102	617	784
SOUTH ATLANTIC.....	449	456	3,245	3,251	Virgin Islands.....	1	1	19	18
Delaware.....	7	3	83	30					
Maryland.....	30	33	278	278					
District of Columbia.....	61	56	355	372					
Virginia.....	24	30	176	186					
West Virginia.....	4	1	19	13					
North Carolina.....	32	38	326	344					
South Carolina.....	29	39	236	389					
Georgia.....	154	125	895	705					
Florida.....	108	131	877	934					

Note: Cumulative Totals include revised and delayed reports through previous months.

SURVEILLANCE SUMMARY
MALARIA — United States and Puerto Rico — 1969

A total of 3,806 cases of malaria with onset of illness in 1969 in the United States or Puerto Rico were reported to the Parasitic Diseases Branch, CDC. This compares with 2,610 cases reported in 1968 (MMWR, Vol. 18, No. 24). This increase was due entirely to a greater number of military cases imported from Vietnam. Military personnel, including recently discharged veterans, accounted for 3,679 cases and civilians for the remaining 127. The total number of Army cases (2,796) represented a 30.3 percent increase over 1968. This increase in Army cases was due to the increase of Army personnel returning from Vietnam, for the attack rate in Army returnees remained relatively constant. The Marines, however, with 19.2 percent of Vietnam-acquired malaria infections in 1969 experienced a 262.2 percent rise in malaria cases compared with 1968. This increase could not be attributed solely to improved reporting or increased numbers of returnees.

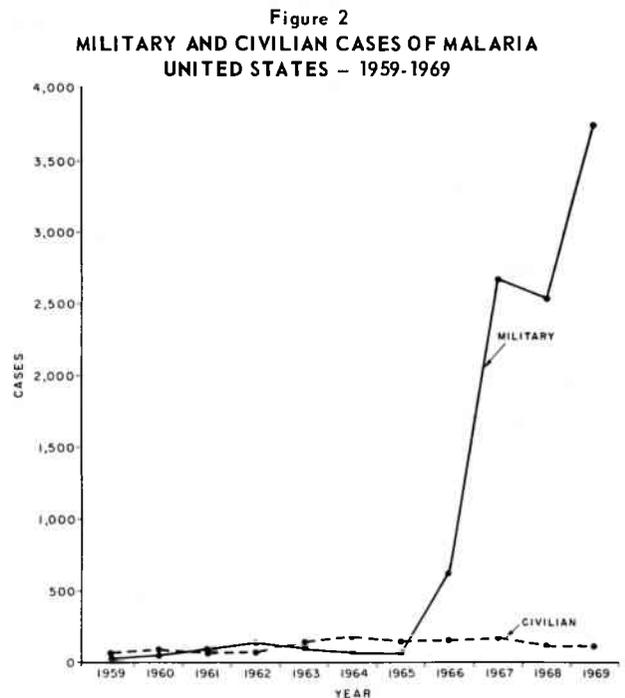
The number of military cases in 1969 was considerably in excess of the annual totals for each year 1959 through 1968; the number of civilian cases was similar to totals for the past 6 years (Figure 2). Of the 3,806 cases, 3,801 were imported,* while five were acquired in the United States. Four of the five were classified as induced, and one was cryptic. No introductions were reported, as compared with five introduced cases in 1968. Cases were reported from all 50 states and Puerto Rico, but California, Georgia, Kentucky, North Carolina, and Texas accounted for 44 percent of the total, reflecting the location within these states of military bases receiving large numbers of Vietnam returnees.

The *Plasmodium* species were identified in 3,702 of the 3,806 cases (97.3 percent). *P. vivax* accounted for 79.2 percent of the infections (3,014 cases), and *P. falciparum* was diagnosed in 14.4 percent (548 cases); these percentages are nearly identical to those reported in 1968. *P. malariae* accounted for 1.0 percent (40 cases) in 1969, while 0.3 percent (10 cases) were due to *P. ovale*. Mixed infections, generally due to *P. vivax* and *P. falciparum*, accounted for 2.4 percent (90 cases) in 1969. The species was undetermined for 2.7 percent (104 cases) of infections.

U.S. citizens accounted for 83 of the 127 civilian cases and foreign visitors for the remaining 44 cases. College students or teachers accounted for more civilian cases than any other occupational group (30 cases), followed by tourists (17 cases). Only six cases were reported in Peace Corps Volunteers.

The onset of illness occurred more than 30 days after arrival in the United States in 73 percent of the 3,280 cases for which both date of onset and date of arrival in this country were known. As in previous years, a marked difference in time of onset was observed between falciparum and vivax malaria; 69.6 percent of the falciparum cases became ill within 1 month after arrival compared with 19.9 percent of the vivax cases.

There were nine malaria fatalities in the United States in 1969, all due to *P. falciparum*, giving an overall malaria case fatality ratio of 0.24 percent and a falciparum case



fatality ratio of 1.64 percent. Five were in civilians and four in servicemen returned from Vietnam. The five civilian fatalities occurred in four American citizens, who acquired their infections in Africa, and in one patient with transfusion-induced malaria. For the eight patients who sought medical attention, a delay of 1 to 12 days transpired (mean 6.1, median 6, and mode 6 days) before the diagnosis of malaria was established. All eight were seen initially by civilian physicians.

During 1969, a total of 233 malaria relapses were reported; 210 relapses were second attacks, 17 were third attacks, 4 were fourth attacks, and 2 were fifth attacks. Thus a total of 4,039 malaria attacks (3,806 primary attacks plus 233 relapses) were reported in 1969.

Infections acquired in Vietnam accounted for 3,629 of the 3,801 imported cases (95.2 percent). Only three of these 3,629 cases were nonmilitary personnel. *P. vivax* was the etiologic agent in 2,921 of the 3,629 cases (80.5 percent), *P. falciparum* in 496 cases (13.7 percent), *P. malariae* in 29 cases (0.8 percent),** and mixed *Plasmodium* species in 89 cases (2.5 percent). In 90 cases (2.5 percent) the *Plasmodium* species was not identified. Army personnel accounted for 77 percent of the military cases from Vietnam, Marines for 19.2 percent, the Navy and Air Force personnel for less than one percent of the cases.

Of the 2,918 military returnees from Vietnam who developed vivax malaria in the United States in 1969, 127 later suffered a vivax relapse for a relapse rate of 4.4 percent; the corresponding rate for 1968 was 7.8 percent, for 1967, 18.4 percent, and for 1966, 29.4 percent. The relapse rate for falciparum infections in military Vietnam returnees

(Continued on page 362)

MALARIA - (Continued from page 361)

in 1969 was 1.4 percent (seven relapses in 496 infections) as compared with 1.2 percent in 1968, 6.8 percent in 1967, and 8.5 percent in 1966. The 1969 relapse rates should be considered preliminary estimates since relapses of 1969 cases may continue to occur in the future.

Of the four induced cases, all had received blood transfusions. Three were due to *P. falciparum*, and one to *P. vivax*. One of the falciparum cases was fatal. The infective donor was identified in all cases. Three of the donors were Vietnam returnees, and one was a visitor from West Africa.

(Reported by the Parasitic Diseases Branch, Epidemiology Program, CDC.)

*TERMINOLOGY (1, 2)

1. Autochthonous
 - a. Indigenous - malaria acquired by mosquito transmission in an area where malaria is a regular occurrence.
 - b. Introduced - malaria acquired by mosquito transmission from an imported case in an area where malaria is not a regular occurrence.

2. Imported
Malaria acquired outside of a specific area (the United States and Puerto Rico in this report)
3. Induced
Malaria acquired through artificial means, i.e., blood transfusion, common syringes, or malariotherapy.
4. Relapsing
Renewal of clinical activity occurring after an interval from the primary attack greater than that due merely to periodicity.
5. Cryptic
An isolated case of malaria not associated with secondary cases as determined through appropriate epidemiologic investigation.

***P. ovale* in 4 cases (0.1 percent)

References:

1. Terminology of Malaria and of Malaria Eradication. Geneva, World Health Organization, 1963, p 32
2. WHO Expert Committee on Malaria - Tenth Report. WHO Techn Rep Ser No. 272, p 34

A copy of the report from which these data were derived is available on request from

Center for Disease Control
Attn: Chief, Parasitic Diseases Branch
Epidemiology Program
Atlanta, Georgia 30333

INTERNATIONAL NOTES

SALMONELLA AGONA INFECTIONS - United Kingdom

Salmonella agona, up to this time an unusual serotype, has recently been reported as the cause of several outbreaks in different parts of England. Details of some of these are now available.

In mid-May all five members of one family living in northwestern England became ill with diarrhea and vomiting 24 to 48 hours after eating cold roast pork; *S. derby* was isolated from all of them. No pork was available for examination. A foodhandler at the retail shop where the pork was sold, who had herself eaten some of it, was found to be a symptomless excreter of this organism. No salmonella was isolated from cold meats or surfaces at the shop. At the butcher's shop which supplied the pork, strains of salmonellae were isolated from the feces of one of four members (*S. agona*) and from four of 15 swabs of equipment (*S. agona* and *S. derby*). Two other strains, one from feces of another staff member and one from boning knives, gave preliminary agglutination test results consistent with either *S. agona* or *S. derby*. It was established that cooked meat was placed on surfaces that had been used for raw meat. After cleaning the premises, another 18 swabs of the environment and utensils were negative, and investigations at two other branches of the firm were also negative. *S. agona* was, however, isolated from an asymptomatic staff member at one of these branches. Since this episode, *S. derby* has been isolated from nine persons in eight households in the area, and *S. agona* from 14 persons in 13 households; most of these persons were symptomatic. No connection has been demonstrated between these cases and the butcher's shop.

At about the same time as this episode, another small outbreak took place in north Wales. A 36-year-old man became ill with vomiting, diarrhea, and fever which lasted

36 hours. During the next 2 days, his father-in-law was also ill with diarrhea. *S. agona* was isolated from both patients. The wives of both men were symptomless excreters, but feces from the two children in the family were negative. The day before the first patient became ill, two oven-cooked chickens had been bought in the morning and kept at room temperature. One was eaten cold that evening and the other for lunch the next day. All members of the family ate the chicken. No chicken remained for examination, and chicken heads from the same shop a week later gave negative results.

The third outbreak took place in northeastern England. The first case was in a mother who had diarrhea while in a maternity hospital. On investigation of her home contacts, four children including a 16-day-old infant thought to be ill with pyloric stenosis were found to be excreting *S. agona*. *S. agona* was also isolated from a mincing machine and chopping blocks at a food shop that supplied the first family with chickens, and from swabs taken from a shelf at the wholesalers where chickens were stored. Investigation at a farm produced *S. agona* from a wooden sticking tray. Other symptomless excreters were found among contacts and foodhandlers. There may have been other infected persons in the community since *S. agona* was isolated from three separate blind-ended sewers in the locality. In another part of the northeast, the infection was reported in two families and another sporadic case.

In June, *S. agona* was isolated from chicken carcasses from a farm in the west midlands. Both the farmer and his wife had had gastroenteritis in May; *S. agona* was isolated from the farmer and his two children who were symptomless.

S. agona has also been isolated from 12 of 19 sets of broiler giblets from a batch of chickens killed in June,

from imported fish meal used as raw material for animal food, and from raw poultry offal which is processed into poultry offal meal, a constituent of animal feed.

In most of these outbreaks, there was direct or indirect evidence that chicken was the source of infection. Since strains of *S. agona* have also been isolated from bovine sources and pork sausages, other sources of infection must be considered; pork may have been the source of the first outbreak described above. *S. agona* has also been isolated from fish meal believed to have been produced in England, although the possibility of mixing with foreign fish meal cannot be overlooked. It is known that this fish meal is being used as poultry feed as well as in feed for other animals.

(Based on reports to the Public Health Laboratory Service from Public Health and Hospital Laboratories in the United Kingdom and Republic of Ireland for the week ending July 24, 1970.)

Editorial Comment:

Since 1963, only three sporadic isolations of *S. agona* have been reported from human sources in the United States. The most recent isolation was made in Illinois in May 1970. Louisiana reported one isolation of this serotype in both 1967 and 1968. Three isolations of *S. agona* from turkeys in Texas in 1969 accounted for all nonhuman isolations since 1963.

QUARANTINE MEASURES

Changes in the "Supplement - Vaccination Certificate Requirements for International Travel," MMWR, Vol. 19, No. 21

The following changes should be made in the Vaccination Certificate Requirements for International Travel:

Italy
Insert: Cholera - And from Guinea (by air), Israel, Jordan, Lebanon, Libya, Syria.

Kenya
Insert: Cholera - And from the Middle East and USSR.

Kuwait
Insert: Cholera - And from Bahrain, Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Muscat and Oman, Qatar, Syria, Turkey, Southern Yemen, Trucial Oman, UAR, Yemen.

Libya
Insert: Cholera - Certificate required from travelers leaving the country.

Malawi
Insert: Cholera - And from Bahrain, Burma, Cyprus, India, Indonesia, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Qatar, Muscat and Oman, Nepal, Pakistan, Saudi Arabia, Southern Yemen, Trucial Oman, Turkey, UAR, USSR, Vietnam, Yemen.

Morocco
Insert: Cholera - And from Bulgaria, Guinea, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Romania, Saudi Arabia, Sudan, Syria, UAR, USSR.

Romania
Insert: Cholera - And from Iran, Iraq, Lebanon, Syria, Turkey, United Arab Republic.

Saudi Arabia
1. Delete "During the period September to March (season of periodic mass congregations:)", and insert: "During the period 2 September 1970 to 25 February 1971 (season of periodic mass congregations)."

2. At the end of the second paragraph, delete: "time spent on board a vessel . . ." and insert: "time spend on board a healthy ship . . ."

3. Delete: "During the period April through August" and insert: "As from 26 February 1971."

Sierra Leone
Insert: Cholera - Vaccination required from arrivals from Guinea.

Southern Yemen
Insert: Cholera - And from Iran, Iraq, Jordan, Lebanon, Syria, Turkey, UAR, USSR.

Switzerland
Insert: Cholera - > 1 year.

Turkey
To the note concerning cholera add: Lebanon, Syria, Union of Soviet Socialist Republics, United Arab Republic.

Union of Soviet Socialist Republics
In the note concerning cholera, insert: Iran.

Yugoslavia
Insert: Cholera - And from Guinea, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Syria, UAR.

Changes in the "Supplement - United States Designated Yellow Fever Vaccination Centers," MMWR, Vol. 18, No. 53

The following additions should be made in the list of United States Designated Yellow Fever Vaccination Centers:

ARIZONA
Phoenix
Maricopa County Health Dept.
A fee is now charged

CALIFORNIA
Fresno
County Dept. of Public Health
Change clinic hours to 2-3 p.m.
every other week by
appointment
(Continued on page 368)

Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

SEPTEMBER 12, 1970 AND SEPTEMBER 6, 1969 (36th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	DIPH- THERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post In- fectious	Serum	Infectious		1970	Cum. 1970
				1970	1969	1970	1970	1970	1969		
UNITED STATES.....	276	7	27	50	40	5	111	933	845	36	2,333
NEW ENGLAND.....	13	-	-	6	2	-	8	94	87	1	69
Maine.....	1	-	-	-	-	-	-	7	12	-	6
New Hampshire.....	-	-	-	-	-	-	-	3	5	-	5
Vermont.....	-	-	-	-	-	-	-	14	1	-	5
Massachusetts.....	9	-	-	1	2	-	4	40	39	-	34
Rhode Island.....	2	-	-	5	-	-	1	15	30	-	8
Connecticut.....	1	-	-	-	-	-	3	15	-	1	11
MIDDLE ATLANTIC.....	57	-	-	5	6	2	53	164	170	4	250
New York City.....	33	-	-	-	-	-	25	14	23	1	30
New York, Up-State...	3	-	-	3	1	-	2	25	23	1	72
New Jersey.*.....	17	-	-	-	3	-	19	45	58	1	69
Pennsylvania.....	4	-	-	2	2	2	7	80	66	1	79
EAST NORTH CENTRAL.....	32	-	-	18	13	1	13	127	110	2	137
Ohio.....	9	-	-	14	6	-	2	21	22	-	27
Indiana.....	2	-	-	-	-	-	-	15	11	1	14
Illinois.....	7	-	-	2	2	1	2	19	17	-	38
Michigan.....	14	-	-	2	4	-	9	65	54	1	58
Wisconsin.....	-	-	-	-	1	-	-	7	6	-	5
WEST NORTH CENTRAL.....	14	4	-	2	2	1	-	42	32	5	210
Minnesota.....	13	-	-	-	-	1	-	4	4	-	19
Iowa.....	-	3	-	2	1	-	-	15	14	-	19
Missouri.....	-	-	-	-	-	-	-	15	7	-	19
North Dakota.....	1	-	-	-	-	-	-	-	-	-	2
South Dakota.....	-	-	-	-	-	-	-	-	2	-	2
Nebraska.....	-	-	-	-	-	-	-	3	2	-	3
Kansas.....	-	1	-	-	1	-	-	5	3	5	146
SOUTH ATLANTIC.....	54	-	3	9	4	1	5	124	77	9	438
Delaware.....	1	-	-	1	-	-	-	-	2	-	2
Maryland.....	7	-	3	-	2	-	-	17	13	1	48
Dist. of Columbia....	1	-	-	-	-	-	1	1	1	-	2
Virginia.....	33	-	-	1	-	-	1	31	6	2	59
West Virginia.....	2	-	-	2	1	-	-	2	7	-	7
North Carolina.....	1	-	-	-	-	-	-	15	2	1	171
South Carolina.....	1	-	-	-	-	-	-	9	8	-	38
Georgia.....	-	-	-	-	-	-	-	22	16	5	68
Florida.....	8	-	-	5	1	1	3	27	22	-	43
EAST SOUTH CENTRAL.....	29	-	-	1	1	-	1	59	56	2	162
Kentucky.....	21	-	-	-	-	-	-	27	11	1	133
Tennessee.....	-	-	-	1	1	-	1	18	31	-	-
Alabama.....	7	-	-	-	-	-	-	11	7	-	18
Mississippi.....	1	-	-	-	-	-	-	3	7	1	11
WEST SOUTH CENTRAL.....	9	2	23	1	1	-	7	108	78	4	414
Arkansas.*.....	-	-	-	-	-	-	-	-	-	-	9
Louisiana.....	-	-	2	-	-	-	2	12	14	2	30
Oklahoma.....	-	1	-	-	1	-	-	11	12	-	69
Texas.....	9	1	21	1	-	-	5	85	52	2	306
MOUNTAIN.....	8	-	1	1	2	-	5	53	52	1	191
Montana.....	-	-	-	-	-	-	-	2	1	-	10
Idaho.....	-	-	-	-	-	-	1	1	-	-	3
Wyoming.....	-	-	-	-	-	-	-	1	1	-	-
Colorado.....	5	-	-	-	1	-	1	8	14	-	161
New Mexico.....	-	-	-	-	1	-	1	11	7	1	8
Arizona.*.....	3	-	1	-	-	-	1	11	13	-	6
Utah.....	-	-	-	-	-	-	1	3	5	-	3
Nevada.....	-	-	-	1	-	-	-	16	11	-	-
PACIFIC.....	60	1	-	7	9	-	19	162	183	8	462
Washington.....	4	1	-	-	-	-	-	19	11	-	45
Oregon.....	-	-	-	3	-	-	-	23	26	1	15
California.....	54	-	-	4	9	-	19	120	146	4	293
Alaska.....	-	-	-	-	-	-	-	-	-	-	1
Hawaii.....	2	-	-	-	-	-	-	-	-	3	108
Puerto Rico.....	-	-	-	-	3	-	2	20	21	-	9
Virgin Islands.....	-	-	-	-	-	-	-	-	-	-	-

* Delayed Reports: Aseptic Meningitis: N.J. Delete 2, Ariz. 2
Hepatitis, Serum: N.J. Delete 3
Hepatitis, Infectious: N.J. Delete 5, Ark. Delete 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
SEPTEMBER 12, 1970 AND SEPTEMBER 6, 1969 (36th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		POLIOMYELITIS		
	1970	Cumulative		1970	Cumulative		1970	Cum. 1970	Total	Paralytic	
		1970	1969		1970	1969			1970	1970	1970
UNITED STATES.....	118	39,508	20,258	23	1,844	2,346	552	75,443	-	-	18
NEW ENGLAND.....	5	881	1,101	1	81	87	33	8,888	-	-	-
Maine.....	-	204	8	-	3	6	4	684	-	-	-
New Hampshire.....	-	50	238	-	8	2	2	330	-	-	-
Vermont.....	-	8	3	-	7	-	1	586	-	-	-
Massachusetts.....	2	414	213	-	36	34	12	2,802	-	-	-
Rhode Island.....	1	120	23	-	5	11	7	1,495	-	-	-
Connecticut.....	2	85	616	1	22	34	7	2,991	-	-	-
MIDDLE ATLANTIC.....	9	4,832	7,485	4	335	386	28	7,499	-	-	-
New York City.....	6	871	4,905	-	81	73	16	2,745	-	-	-
New York, Up-State...	1	269	596	-	66	72	NN	NN	-	-	-
New Jersey.....	2	1,704	896	2	128	157	4	2,070	-	-	-
Pennsylvania.....	-	1,988	1,088	2	60	84	8	2,684	-	-	-
EAST NORTH CENTRAL.....	29	9,762	2,180	4	209	320	200	20,158	-	-	2
Ohio.....	4	3,805	375	3	83	121	26	3,610	-	-	-
Indiana.....	1	270	466	-	20	38	13	1,800	-	-	-
Illinois.....	3	3,048	495	1	45	44	9	1,739	-	-	-
Michigan.....	14	1,718	273	-	52	95	41	4,965	-	-	1
Wisconsin.....	7	921	571	-	9	22	111	8,044	-	-	1
WEST NORTH CENTRAL.....	-	3,863	525	3	96	118	23	3,762	-	-	1
Minnesota.....	-	38	7	-	13	25	-	353	-	-	-
Iowa.....	-	1,142	330	-	12	16	16	2,297	-	-	-
Missouri.....	-	1,275	26	1	56	51	-	270	-	-	1
North Dakota.....	-	318	14	2	5	1	6	286	-	-	-
South Dakota.....	-	93	3	-	-	1	-	40	-	-	-
Nebraska.....	-	924	138	-	5	9	1	380	-	-	-
Kansas.....	-	73	7	-	5	15	-	136	-	-	-
SOUTH ATLANTIC.....	6	7,152	2,490	3	376	404	58	8,669	-	-	1
Delaware.....	-	260	373	-	3	8	7	304	-	-	-
Maryland.....	-	1,376	75	1	35	38	6	931	-	-	-
Dist. of Columbia....	-	343	-	-	3	9	1	188	-	-	-
Virginia.....	-	1,981	883	-	40	50	6	1,995	-	-	-
West Virginia.....	1	312	193	-	10	18	10	2,097	-	-	1
North Carolina.....	2	861	315	-	76	69	NN	NN	-	-	-
South Carolina.....	1	595	116	-	44	55	6	842	-	-	-
Georgia.....	-	14	2	1	34	70	-	2	-	-	-
Florida.....	2	1,410	533	1	131	87	22	2,310	-	-	-
EAST SOUTH CENTRAL.....	11	1,319	107	-	133	144	37	4,383	-	-	-
Kentucky.....	1	755	63	-	45	50	6	1,582	-	-	-
Tennessee.....	3	377	17	-	58	54	26	2,493	-	-	-
Alabama.....	6	98	4	-	21	24	4	261	-	-	-
Mississippi.....	1	89	23	-	9	16	1	47	-	-	-
WEST SOUTH CENTRAL.....	33	7,549	4,496	5	251	320	76	7,234	-	-	14
Arkansas.....	-	30	16	-	22	30	2	119	-	-	-
Louisiana.....	1	100	120	-	62	84	1	28	-	-	-
Oklahoma.....	3	452	136	-	19	31	10	2,402	-	-	-
Texas.....	29	6,967	4,224	5	148	175	63	4,685	-	-	14
MOUNTAIN.....	10	1,522	852	1	38	43	36	3,463	-	-	-
Montana.....	-	61	17	-	1	8	6	727	-	-	-
Idaho.....	3	40	89	-	6	8	-	87	-	-	-
Wyoming.....	-	11	-	-	2	-	1	35	-	-	-
Colorado.....	1	183	140	-	12	7	6	1,106	-	-	-
New Mexico.....	4	202	245	-	1	6	13	670	-	-	-
Arizona.....	2	969	351	-	13	10	10	714	-	-	-
Utah.....	-	35	9	-	2	2	-	124	-	-	-
Nevada.....	-	21	1	1	1	2	-	-	-	-	-
PACIFIC.....	15	2,628	1,022	2	325	524	61	11,387	-	-	-
Washington.....	1	525	59	-	43	54	2	4,214	-	-	-
Oregon.....	-	228	198	-	25	15	4	993	-	-	-
California.....	13	1,554	719	2	255	434	30	4,687	-	-	-
Alaska.....	1	138	8	-	-	11	-	379	-	-	-
Hawaii.....	-	183	38	-	2	10	25	1,114	-	-	-
Puerto Rico.....	8	887	1,448	-	5	19	17	733	-	-	-
Virgin Islands.....	-	6	40	-	1	-	-	1	-	-	-

* Delayed Reports: Measles: Mass. Delete 2
Meningococcal Infection: Ariz. Delete 1

Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
SEPTEMBER 12, 1970 AND SEPTEMBER 6, 1969 (36th WEEK) - CONTINUED

AREA	RUBELLA		TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970	1970	Cum. 1970
UNITED STATES.....	292	49,252	4	81	9	101	11	208	10	289	55	2,146
NEW ENGLAND.....	19	2,425	-	3	-	1	-	7	-	-	1	75
Maine.....	-	386	-	-	-	-	-	-	-	-	1	27
New Hampshire.....	-	150	-	-	-	-	-	-	-	-	-	1
Vermont.....	4	53	-	-	-	-	-	-	-	-	-	40
Massachusetts.....	8	1,178	-	2	-	1	-	5	-	-	-	3
Rhode Island.....	5	107	-	-	-	-	-	-	-	-	-	1
Connecticut.....	2	551	-	1	-	-	-	2	-	-	-	3
MIDDLE ATLANTIC.....	8	3,932	1	8	-	2	-	45	-	12	3	193
New York City.....	3	580	-	3	-	-	-	11	-	-	-	-
New York, Up-State..	3	422	1	1	-	1	-	16	-	6	2	181
New Jersey.....	-	854	-	3	-	-	-	10	-	3	-	-
Pennsylvania.....	2	2,076	-	1	-	1	-	8	-	3	1	12
EAST NORTH CENTRAL....	38	10,238	-	14	-	18	1	28	1	9	4	177
Ohio.....	12	2,027	-	1	-	2	-	10	1	8	-	44
Indiana.....	14	1,844	-	6	-	12	-	1	-	-	2	18
Illinois.....	2	1,690	-	3	-	2	1	7	-	1	1	56
Michigan.....	1	2,649	-	4	-	-	-	8	-	-	-	18
Wisconsin.....	9	2,028	-	-	-	2	-	2	-	-	1	41
WEST NORTH CENTRAL....	12	3,278	-	4	1	25	-	7	-	2	18	413
Minnesota.....	-	117	-	1	1	1	-	1	-	-	6	88
Iowa.....	2	2,001	-	1	-	-	-	1	-	-	4	74
Missouri.....	6	411	-	1	-	21	-	1	-	2	2	76
North Dakota.....	3	148	-	-	-	1	-	2	-	-	1	28
South Dakota.....	-	1	-	1	-	1	-	-	-	-	-	60
Nebraska.....	1	544	-	-	-	-	-	2	-	-	-	6
Kansas.....	-	56	-	-	-	1	-	-	-	-	5	81
SOUTH ATLANTIC.....	33	6,235	2	21	-	9	-	30	7	196	6	436
Delaware.....	-	41	-	-	-	-	-	-	-	4	-	-
Maryland.....	1	315	-	-	-	-	-	9	-	20	-	1
Dist. of Columbia...	-	19	-	1	-	-	-	1	-	-	-	-
Virginia.....	-	692	1	1	-	1	-	4	4	51	3	181
West Virginia.....	11	1,286	-	-	-	-	-	-	-	5	2	114
North Carolina.....	-	39	-	3	-	4	-	2	1	73	-	1
South Carolina.....	7	642	-	1	-	-	-	-	2	35	-	-
Georgia.....	-	-	1	3	-	3	-	8	-	8	-	78
Florida.....	14	3,201	-	12	-	1	-	6	-	-	1	61
EAST SOUTH CENTRAL....	23	2,622	-	9	-	4	6	21	1	32	8	174
Kentucky.....	5	921	-	1	-	1	5	6	-	3	4	93
Tennessee.....	11	1,345	-	3	-	3	-	9	1	20	1	50
Alabama.....	7	278	-	5	-	-	1	6	-	6	3	30
Mississippi.....	-	78	-	-	-	-	-	-	-	3	-	1
WEST SOUTH CENTRAL....	117	8,763	1	13	1	26	3	18	1	31	4	371
Arkansas.....	-	34	-	3	-	10	-	3	-	5	-	63
Louisiana.....	-	150	-	3	-	4	1	2	-	1	-	55
Oklahoma.....	-	808	-	-	1	9	-	1	1	20	2	74
Texas.....	117	7,771	1	7	-	3	2	12	-	5	2	179
MOUNTAIN.....	16	1,968	-	-	7	10	1	13	-	6	7	71
Montana.....	-	315	-	-	-	-	-	1	-	1	-	1
Idaho.....	7	189	-	-	-	-	-	-	-	2	-	-
Wyoming.....	1	134	-	-	-	-	-	-	-	1	-	3
Colorado.....	-	393	-	-	-	-	-	3	-	2	4	34
New Mexico.....	3	209	-	-	-	-	1	6	-	-	2	11
Arizona.....	5	566	-	-	-	-	-	2	-	-	-	11
Utah.....	-	162	-	-	7	10	-	1	-	-	-	2
Nevada.....	-	-	-	-	-	-	-	-	-	-	1	9
PACIFIC.....	26	9,791	-	9	-	6	-	39	-	1	4	236
Washington.....	-	4,600	-	2	-	2	-	4	-	-	-	8
Oregon.....	3	839	-	3	-	1	-	1	-	-	-	1
California.....	21	4,051	-	4	-	3	-	31	-	1	4	227
Alaska.....	-	95	-	-	-	-	-	2	-	-	-	-
Hawaii.....	2	206	-	-	-	-	-	1	-	-	-	-
Puerto Rico.....	-	26	1	9	-	-	-	4	-	-	4	39
Virgin Islands.....	-	-	-	-	-	-	1	1	-	-	-	-

Morbidity and Mortality Weekly Report

367

Week No. **TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED SEPTEMBER 12, 1970**

36

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	676	413	49	24	SOUTH ATLANTIC:	1,114	584	48	52
Boston, Mass.-----	178	101	21	7	Atlanta, Ga.-----	128	61	5	10
Bridgeport, Conn.-----	29	17	4	2	Baltimore, Md.-----	203	95	2	5
Cambridge, Mass.-----	37	25	6	—	Charlotte, N. C.-----	57	33	—	2
Fall River, Mass.-----	29	19	—	—	Jacksonville, Fla.-----	97	50	3	5
Hartford, Conn.-----	62	37	—	2	Miami, Fla.-----	105	52	—	6
Lowell, Mass.-----	33	22	2	2	Norfolk, Va.-----	53	32	7	3
Lynn, Mass.-----	23	14	1	—	Richmond, Va.-----	72	40	8	2
New Bedford, Mass.-----	28	19	—	—	Savannah, Ga.-----	22	14	2	2
New Haven, Conn.-----	54	27	3	5	St. Petersburg, Fla.-----	96	76	3	3
Providence, R. I.-----	53	31	3	3	Tampa, Fla.-----	71	38	8	6
Somerville, Mass.-----	14	9	—	—	Washington, D. C.-----	180	74	7	8
Springfield, Mass.-----	42	28	5	—	Wilmington, Del.-----	30	19	3	—
Waterbury, Conn.-----	29	17	—	1					
Worcester, Mass.-----	65	47	4	2	EAST SOUTH CENTRAL:	504	275	11	19
MIDDLE ATLANTIC:	2,907	1,703	98	131	Birmingham, Ala.-----	71	41	—	3
Albany, N. Y.-----	42	28	1	1	Chattanooga, Tenn.-----	42	19	1	1
Allentown, Pa.-----	41	28	1	1	Knoxville, Tenn.-----	28	18	—	—
Buffalo, N. Y.-----	122	68	5	5	Louisville, Ky.-----	92	44	3	3
Camden, N. J.-----	33	19	1	4	Memphis, Tenn.-----	117	62	2	6
Elizabeth, N. J.-----	23	12	1	—	Mobile, Ala.-----	38	20	1	3
Erie, Pa.-----	40	26	3	2	Montgomery, Ala.-----	22	16	3	1
Jersey City, N. J.-----	55	22	6	1	Nashville, Tenn.-----	94	55	1	2
Newark, N. J.-----	62	34	2	3	WEST SOUTH CENTRAL:	1,021	550	31	71
New York City, N. Y.-----	1,600	963	48	74	Austin, Tex.-----	32	16	—	—
Paterson, N. J.-----	39	19	—	4	Baton Rouge, La.-----	43	24	2	5
Philadelphia, Pa.-----	302	162	1	17	Corpus Christi, Tex.-----	29	8	—	5
Pittsburgh, Pa.-----	161	78	11	7	Dallas, Tex.-----	137	62	5	13
Reading, Pa.-----	42	27	1	—	El Paso, Tex.-----	45	25	—	7
Rochester, N. Y.-----	100	57	1	9	Fort Worth, Tex.-----	79	48	3	5
Schenectady, N. Y.-----	28	15	7	—	Houston, Tex.-----	198	100	5	10
Scranton, Pa.-----	30	20	—	—	Little Rock, Ark.-----	40	22	2	—
Syracuse, N. Y.-----	102	63	2	—	New Orleans, La.-----	157	94	3	9
Trenton, N. J.-----	33	18	1	1	Oklahoma City, Okla.-----	64	39	5	4
Utica, N. Y.-----	18	16	3	—	San Antonio, Tex.-----	90	57	1	4
Yonkers, N. Y.-----	34	28	3	2	Shreveport, La.-----	43	18	3	4
					Tulsa, Okla.-----	64	37	2	5
EAST NORTH CENTRAL:	2,331	1,326	59	108	MOUNTAIN:	436	259	13	30
Akron, Ohio-----	46	22	—	4	Albuquerque, N. Mex.-----	51	32	4	3
Canton, Ohio-----	36	25	—	1	Colorado Springs, Colo.-----	36	21	7	3
Chicago, Ill.-----	643	363	22	26	Denver, Colo.-----	107	61	1	12
Cincinnati, Ohio-----	109	62	2	7	Ogden, Utah-----	21	9	—	—
Cleveland, Ohio-----	205	109	5	16	Phoenix, Ariz.-----	114	66	1	6
Columbus, Ohio-----	135	77	—	5	Pueblo, Colo.-----	12	10	—	—
Dayton, Ohio-----	87	45	1	5	Salt Lake City, Utah-----	50	28	—	3
Detroit, Mich.-----	291	158	9	7	Tucson, Ariz.-----	45	32	—	3
Evansville, Ind.-----	56	38	2	2					
Flint, Mich.-----	46	19	1	3	PACIFIC:	1,209	721	19	68
Fort Wayne, Ind.-----	51	29	1	—	Berkeley, Calif.-----	30	23	—	1
Gary, Ind.-----	32	19	1	2	Fresno, Calif.-----	50	26	—	4
Grand Rapids, Mich.-----	55	38	3	1	Glendale, Calif.-----	18	11	—	3
Indianapolis, Ind.-----	173	101	—	11	Honolulu, Hawaii-----	48	22	1	1
Madison, Wis.-----	40	20	7	—	Long Beach, Calif.-----	85	53	5	4
Milwaukee, Wis.-----	83	50	—	4	Los Angeles, Calif.-----	285	158	6	33
Peoria, Ill.-----	43	23	—	5	Oakland, Calif.-----	68	45	1	1
Rockford, Ill.-----	32	24	2	2	Pasadena, Calif.-----	28	22	—	—
South Bend, Ind.-----	41	25	3	2	Portland, Oreg.-----	120	66	—	6
Toledo, Ohio-----	82	50	—	2	Sacramento, Calif.-----	48	25	—	1
Youngstown, Ohio-----	45	29	—	3	San Diego, Calif.-----	72	41	1	9
					San Francisco, Calif.-----	133	82	1	—
WEST NORTH CENTRAL:	739	468	19	37	San Jose, Calif.-----	38	29	—	1
Des Moines, Iowa-----	50	32	1	3	Seattle, Wash.-----	100	66	1	1
Duluth, Minn.-----	21	9	2	3	Spokane, Wash.-----	52	30	2	3
Kansas City, Kans.-----	41	26	2	2	Tacoma, Wash.-----	34	22	1	—
Kansas City, Mo.-----	125	81	—	3					
Lincoln, Nebr.-----	16	9	2	3	Total	10,937	6,299	347	540
Minneapolis, Minn.-----	108	77	3	4	Expected Number	11,916	6,811	338	484
Omaha, Nebr.-----	67	40	2	8	Cumulative Total (includes reported corrections for previous weeks)	465,469	265,723	18,377	21,970
St. Louis, Mo.-----	226	140	5	5					
St. Paul, Minn.-----	51	35	—	3					
Wichita, Kans.-----	34	19	2	3					
Las Vegas, Nev.*	19	6	2	3	*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.				

+ Delayed report for week ended September 5, 1970

QUARANTINE MEASURES - (Continued from page 363)

Loma Linda Dept. of Preventive Medicine
School of Public Health
Loma Linda University 92354
714, 796-8333
Clinic hours: Wed., 8 a.m.-12 noon
Fee: Yes

Napa County Health Dept.
2261 Elm St., 94558
707, 224-5433

Oakland Thomas Reich, M.D.
Change clinic hours to Tues.
and Thurs., 1-2 p.m. and by
appointment only.

Sacramento County Health Dept.
Change clinic hours to Thurs.
and Fri., 2-4 p.m.

DISTRICT OF COLUMBIA Freedmen's Hospital
Sixth and Bryant Streets, NW
20001
202, 232-6262
Clinic hours: Tues., 1 p.m.
and by appointment
Fee: Yes

FLORIDA
Jacksonville U.S. Public Health Service
Clinic
Change address to 311 West
Monroe St.
Change clinic hours to Tues.
and Thurs., 2-3 p.m.

INDIANA
Elkhart County Health Unit
Change telephone number to
219, 294-2224

Indianapolis Indiana University Medical
Center
Change clinic hours to Fri.,
9:30 a.m.

NORTH DAKOTA
Grand Forks Student Health Service
University of North Dakota
McCannel Hall 58201
701, 777-3963
Clinic hours: Tues., 1:30 p.m.
Fee: No

RHODE ISLAND
Providence Dept. of Health
Change telephone number to
277-2362

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 21,000 IS PUBLISHED AT THE CENTER FOR DISEASE CONTROL, ATLANTA, GEORGIA.

DIRECTOR, CENTER FOR DISEASE CONTROL DAVID J. SENCER, M.D.
DIRECTOR, EPIDEMIOLOGY PROGRAM PHILIP S. BRACHMAN, M.D.

EDITOR MICHAEL B. GREGG, M.D.
MANAGING EDITOR PRISCILLA B. HOLMAN

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE CENTER FOR DISEASE CONTROL WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CENTER FOR DISEASE CONTROL. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

CENTER FOR DISEASE CONTROL
ATTN: THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES AT CLOSE OF BUSINESS ON FRIDAY; COMPILED DATA ON A NATIONAL BASIS ARE OFFICIALLY RELEASED TO THE PUBLIC ON THE SUCCEEDING FRIDAY.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION
CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333
OFFICIAL BUSINESS

2/69 46-1-10,18,19,22
LIBRARY
COMMUNICABLE DISEASE CENTER

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF H.E.W.

